

# Thermostat Product Stewardship Initiative



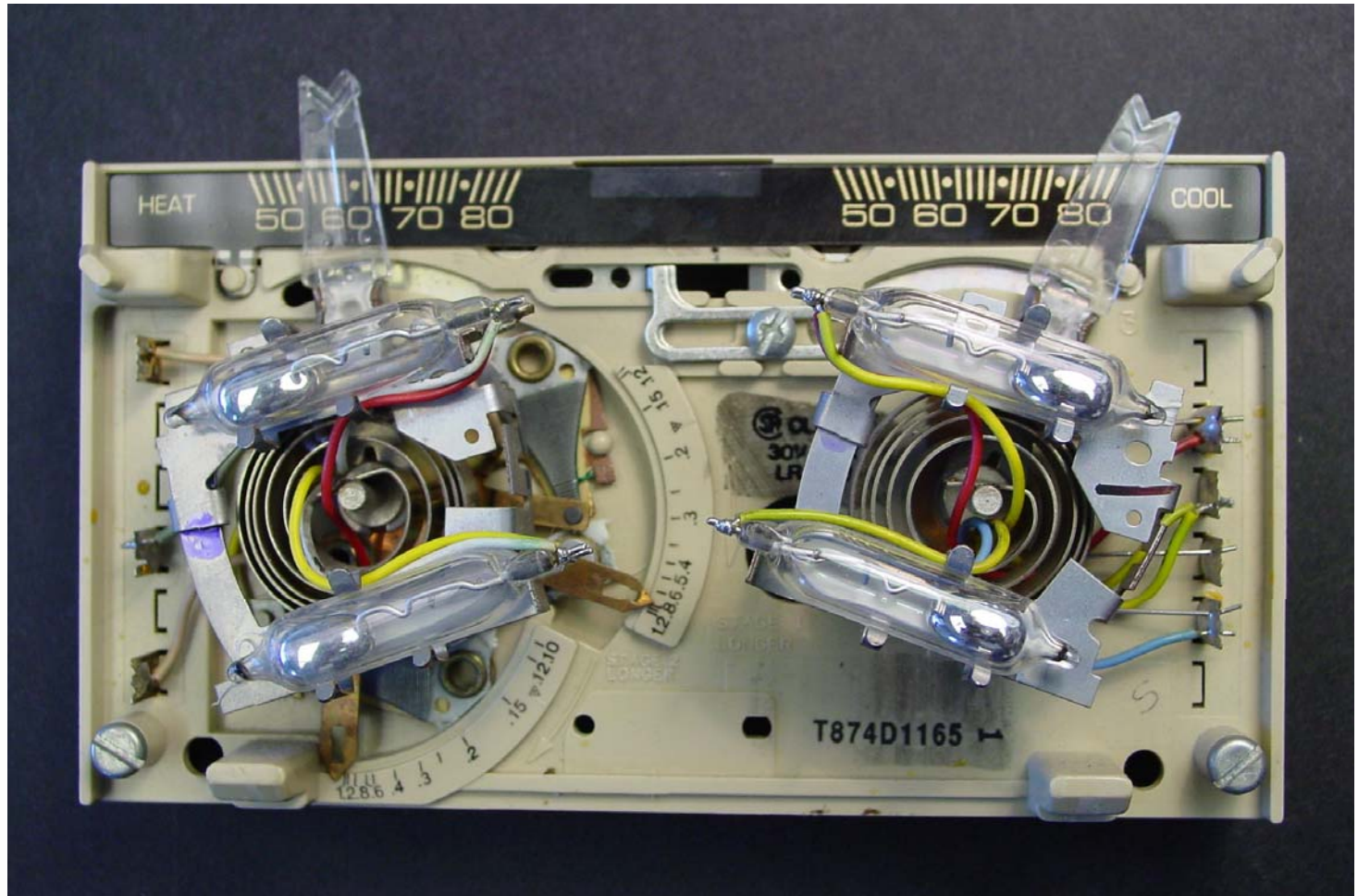
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# Thermostat Problem Statement

- A significant number of thermostats contain mercury, which is a potent neurotoxin.
- Improper waste handling/disposal of mercury thermostats can result in mercury releases.
- Small fraction of mercury thermostats being collected.
  - Estimated 11 million thermostats removed in 2003 in the US, according to Frost & Sullivan market report
  - 65,000 mercury thermostats recovered through TRC
- Mercury thermostats continue to be sold.









# Product Stewardship Institute

- Founded in December 2000
- Based at the University of Massachusetts/Lowell
- Coalition/Affiliate Members
  - Agency leaders pledge to work with PSI on product stewardship issues
  - 29 State members
  - 25 Local agency members



# PSI Mission

- “...assists state and local government agencies in establishing **cooperative agreements** with industry and developing other initiatives that reduce the health and environmental impacts from consumer products.”



# PSI Projects

- Mercury Thermostats
- Electronics (Staples pilot)
- Paint (Benjamin Moore pilot)
- Tires
- Pressurized Gas Cylinders
- Radioactive Devices
- Beverage Containers



# **Thermostat Project Participants**

- **Government**
  - **EPA**
  - **States - 12**
  - **Local – 6**
  - **NEWMOA**



The header features a collage of abstract shapes and colors, including a yellow star, green foliage, and blue and purple textured areas.

# **Thermostat Project Participants Cont'd**

- **Industry**

- **Manufacturers**
- **Wholesalers**
- **Contractors**
- **Retailers**
- **Demolition firms**

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# **Thermostat Project Participants Cont'd**

- Others**
  - Electric Utility**
  - Environmental Group**



# PSI Role in Thermostat Dialogue

- Research/technical competency
  - Interviewed 30 industry, government officials
  - Developed detailed issue report
  - Surveyed Household/Business Hazardous Waste collection centers
- Forum for stakeholder dialogue
  - Conference calls
  - Two national meetings



# **PSI Role in Thermostat Dialogue (cont'd)**

- Design and implement pilot projects
- Assist in longer-term agreements
- Clearinghouse for thermostat product stewardship policies and programs



# Dialogue Goals

- (1) Increase the collection of mercury-containing thermostats from Heating, Ventilating and Air Conditioning (HVAC) contractors and electrical wholesalers through the Thermostat Recycling Corporation (TRC) program.





## **Dialogue Goals - Continued**

- (2) Increase the collection of mercury-containing thermostats from homeowners, demolition contractors, and other non-HVAC contractors through the TRC program and/or other mechanisms.



## **Dialogue Goals - Continued**

- (3) Explore the benefits and costs of various types of thermostats, and identify the opportunities and viability of replacing mercury thermostats with non-mercury alternatives.



# Priority Issues

1. Increase HVAC contractor awareness
2. Increase options for HVAC contractor collection
3. Increase HVAC contractor motivation to participate
4. Measure success of collection program
5. Provide for homeowner/non-HVAC contractor collection
6. Provide for demolition contractor collection
7. Reduce or eliminate the sale of mercury thermostats



# **Tier 1 Results**

1. Expand the number of TRC collection centers among HVAC wholesalers, with a focus on regional or national wholesaler chains.
2. Expand the TRC program to include larger urban HVAC contractors and rural HVAC contractors, doubling the number of collection points by the end of 2005.



## **Tier 1 Results - Continued**

3. Test the effectiveness of financial incentives to increase the number of collected thermostats, with test projects for the states of Oregon and Indiana. King County, WA is also doing its own financial incentive project.
4. Encourage Home Depot's HD Supply division (which sells to the maintenance and repair industry) to become a TRC collector.





## **Tier 2 Results**

1. Develop an HVAC contractor outreach strategy, including education on Energy Star purchases.
2. Test pilot projects of the effectiveness of wholesaler collection of thermostats from homeowners/non-contractors through HHW programs.



## **Tier 2 Results - Continued**

3. Develop a retailer/homeowner education strategy
4. Share results and continue the discussion of issues at a third meeting
5. Do some preliminary planning and analysis of collection through a mail-back program



# **For more information**

Product Stewardship Institute

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